Cionus alauda, Hbst. (blattariae, F.). On Scrophularia aquatica, S. nodosa, and Verbascum nigrum. Generally distributed and not uncommon from Norfolk and the Midlands southwards, rarer further north, Yorkshire, Northumberland, Durham. Scotland scarce, Tweed and Forth areas.

I have taken it in June and August at Oxted, Battle, Sevenoaks,

etc., etc.

Cionus (Cleopus) pulchellus, Hbst. On Scrophularia nodosa. Local: but widely distributed from Northumberland southwards. Scotland, rare, Solway district. Ireland, Kerry. I have taken it in May and July in Coombe Wood, Guestling Wood, Buddon Wood, etc.

## Notes on Collecting Butterflies at Hong Kong.

By COMMANDER G. C. WOODWARD, R.N.

Hong Kong is situated about 70 miles inside the tropics. The island itself is about seven miles long by about four miles wide, and

rises to a height of over 1,000 in the centre of the island.

The island is covered with dense vegetation, but there is nothing much in the way of very large trees, the great majority being small firs. The island is well looked after by the Afforestation Department, which prevents the natives cutting any timber, brushwood, etc.

The mainland is mostly bare, owing to the habit of the natives of cutting down everything in the way of firewood as fast as it grows.

The seasons roughly divide themselves into a wet and a dry, the wet season lasting from April to October: during this period the weather is very hot and moist, with much rain, and the island is frequently visited by those very violent storms called typhoons, which sometimes do a large amount of damage. The curious feature about these typhoons is that they do not seem very destructive to insect life, as a very few days after the visit of one of these storms, butterflies appear again in the greatest profusion, and in an undamaged state.

The dry and cold season lasts from November to March, when the temperature is of temperate description, the thermometer falling rapidly sometimes down among the forties. These cold snaps some-

times last several days.

Generally speaking the wet season is the best for collecting Lepidoptera, April and May and again in September and October being the best months; but a spell of warm weather in the dry season seems to produce its quota of insects, of which a few seem to have different

forms in the wet and dry season.

Among the most brilliant of the butterflies found in Hong Kong are those of the family Papilionidae. These splendid insects are well represented on the island. Among the common and most brilliant is Papilio paris; this insect I found to be abundant in the Happy Valley, where it flits about between the trees with a fairly rapid flight, occasionally stopping to feed at the flowers of Lantana camara, a very common shrub on the island, and of which most butterflies seem uncommonly fond. The commonest Papilio on the island is, I think, P. helenus. This insect appears everywhere, and seems to be the only Papilio found here during the dry season, when it sometimes appears, but is somewhat scarce at that time of the year. The largest species

of this family is P. memnon, which occurs fairly frequently in the more wooded parts of the island; it has a peculiar loping sort of flight, and is generally travelling much faster than it appears, when one tries to get it into the net.

The other species of the black forms of Papilio found here are:— P. protenor, P. polytes, which is common in most places, P. bianor, which looks somewhat like P. paris when on the wing, and P. aristolochiae, which is said to be rare, although I succeeded in obtaining three examples in one day at the Happy Valley; the Hong Kong specimens are of a much larger and brighter description than those of my collection from India and the Malay States. I think that this species may often be mistaken for the "red" female of P. polytes, which is of frequent occurrence here.

The next three species that I collected belong to the "Sarpedon" group, viz., P. sarpedon, P. agamemnon, and P. enrypilus. These insects are fairly common here, but have an extremely rapid flight, and one's only chance of netting them is when they are poised in front of a flower engaged in feeding, and even then the utmost caution must be observed in the approach, as once they are alarmed they are off like the wind.

Another strikingly handsome Papilio found here is P. antiphates, which occurs in the rainy season, but did not seem to me to be very common; I only found it during the month of July, on the mainland. P. clytia, in the black and white form, is also fairly frequent. insect appears to mimic certain species of the Danaidae, which are of such common occurrence here. The last of the "swallow-tails" here is P. demoleus, a fairly common species, and found on waste pieces of ground.

From the foregoing list it will be seen that the genus Papilio is well represented for so small an area. It will also be observed that although Hong Kong is nearly outside the tropics, and has a temperate and sometimes quite cold winter, the species are nearly all tropical and not Palæarctic.

I have not found that the Fam. Pieridae is so well represented as one would suppose. I only succeeded in obtaining nine species of this large family during my stay here, although I expect that there were other members of the family that I did not succeed in obtaining.

About the most brilliant of the Pierids I found was Delias hierte. which I discovered was uncommon, and when seen was generally flying at a great height around trees. D. pasithoe I noted in the month of February, it seemed local, but common enough when found. Terias hecabe is about the commonest insect here, it seems to be everywhere, flitting here and there low down over the ground. Other species I have collected here are Ixias pyrene, Hebomoia glaucippe, which generally flies fairly high up amongst the trees, and the two Catopsilia, C. puranthe and C. pomona, both of which are common on waste ground.

Of the genus Pieris, P. canidia and P. coronis are the only two I have captured here, both of them very common at the right season. Among some of the more striking of the Lepidoptera found here are those of the Sub-Fam. Danainae, the commonest species being Danais similis, which abounds everywhere. The other species of the black and greenish Danaids I have obtained being D. limniace and D. septentrionis, which, while fairly common, are not so frequently met with as the first one. *D. plexippus* is a very common insect, and one that appears in the winter should the weather become warm enough. *D. chrysippus* is here, as elsewhere in the eastern tropics, very common.

The genus *Euploca* is well represented by individuals, these conspicuous insects being very abundant. They have a floating lazy kind of flight, and are quite easy to capture. The two species I found

common are E. midamus and E. amymone.

The Satyridae are represented by the genera Lethe, Mycalesis, Melanitis, and Ypthima. Of the first-named genus, Lethe europa, is the representative, this insect is very common, especially round clumps of bamboo. Another insect extremely common in similar situations is Mycalesis mineus; it has a very weak and jerky sort of flight, and flits in and out among the undergrowth. Of the third genus the species found is Melanitis leda. I did not note it very commonly, and it appears to have two separate forms, one found in the dry and the other in the wet season. The last species is that extremely abundant little butterfly Ypthima avanta, which seems to turn up everywhere in the greatest profusion.

Among the Nymphalinae, there appears to be quite a large number

of species found in Hong Kong.

Among the commonest is Cupha erymanthis, which I found likes to keep to the more wooded portion of the island: also Atella phalantha, which inhabits similar localities. Another pretty little butterfly found here is Symbrenthia lucina, but I think it must be rare, as I only saw one specimen. Pyrameis cardui occurs, as in most other places of the world, but not commonly. The genus Precis is well represented, I have taken the following, P. orythia, P. almana, two forms, one wet season and one dry, common; P. lemonias, common; and P. oenone. Of the last-named species I only took one specimen, so I conclude it is uncommon most years. Two species of Neptis, N. eurynome and N. columnella, both fairly common; Athyma nefte and A. perius, both rather hard to capture. Euthalia phemius I found fairly commonly, it is fond of sitting on leaves of trees rather high up. Among the genus Apatura I noted A. parisatis, the 2 more frequent than the 3. I have nearly always taken it settled on the ground. Among the Charaves, C. polyxena appears to be the representative here, it is found in the wooded localities. Of the Sub-Fam. Nemeobiinae I have taken Abisara echerius, which appears to be out even on the coldest days, and seems to be a sluggish little butterfly, which flits about close to the ground, settling every few yards.

Among the Lycaenids there are some I have not yet been able to identify, but the following are the species I have named so far: Curetis dentata; Zizera maha, found commonly in grassy places, flitting close to the ground; Jamides bochus, uncommon; Lehera eryx, uncommon; Spindasis lohita, and Chilades laius, fond of grassy places and waste ground. This brings my list of Lycaenidas to an end, owing to lack of means to identify species; but I have several species in my collection

I took at Hong Kong I have not yet been able to identify.

Hong Kong appears to be very rich in Hesperiids. Among the species I took there is *Parnara guttatus*, the others I have not yet had time to identify. Taking into consideration the fact that being in a ship at Hong Kong for only short intervals, and therefore not

having such good opportunities for collecting in one given spot as if one were stationed ashore, it would seem from these short notes, that considering its small size, the Island of Hong Kong must be extraordinarily prolific in its lepidopterous fauna.

## Lepidoptera in Peninsular Italy during the year 1920.

By O. QUERCI.

(Continued from page 29.)

On August 1st, 1920, my son-in-law, Dr. Enzo Romei left for the Monti Sibillini to complete the researches begun by my wife and daughter in 1912 and continued in 1913, in 1918 and in 1919. The Monti Sibillini afford a lepidopterogical fauna very rich and varied, but every species is localized and to collect many species it is necessary to walk long distances by difficult and fatiguing paths and often, on account of the long distances, to sleep on open mountains. My wife and daughter, though active and indefatigable walkers, often found themselves confronted by difficulties which they could not surmount. Dr. Romei, a young and energetic army officer accustomed to the hard life of the Alps during the war and inspired by great love of lepidopterology, was certainly in excellent condition to reach the furthest and most difficult localities and to complete the entomological study of the Sibillini.

As in the whole of peninsular Italy so also in the Sibillini mountains the emergence of lepidoptera takes place in two periods sharply divided by the summer pause, which corresponds with the time of greatest heat and drought. In normal years the first period lasts from . June 15th to July 20th, and in this period there emerge:—Syntoniis pheyea, L., race pfluemeri, Wacq. S. marjana, Stander, race quercii, Vrty. Procris statices, L., race not identified. P. globulariae, Hb., race notata, Z. P. cognata, Ramb., race not identified. P. tenuicornis, Z., race not identified. P. geryon, Hb., race not identified. Zygaena rubicundus, Hb., race rubicundus. Z. purpuralis, Brünn., race fiorii, Costantini. Z. scabiosae, Schev., race orion, Calb. Z. achilleae, Esp., race aestivalis, Obth. Z. lonicerae, Schev., race virax, Vrty. Z. stoechadis, Bkh., race montivaga, Vrty. Z. transalpina, Esp., race altitudinaria, Trti. Z. oxytropis, B., race sibyllina, Vrty. Z. carniolica, Scop., race incerta. Recci. Nisoniades tages, L., race clarus, Carad., I. gen. tayes. Erynnis laratherae, Esp., race australior, Vrty. E. bactica, Ramb., race rostagnoi, Vrty. Hesperia serratulae, Ramb., race serratulae. II. malroides, Elw. and Edw., race pseudomalrae, Vrty., I. gen. Powellia sao, Hb., race gracilis, Vrty., I. gen. sao. pseudomalrae. Augiades sylvanus, Esp., race 'sylvanus (only one generation in the Sibillini). Chrysophanus hippothoë, L., race italica, Calb. Rumicia phlacas, L., race elens, F., II. gen. initia-candata, Tutt, and elens, F. Loweia alciphron, Rott., race romanorum, Fruhst. Glaucopsyche cyllarus, Rott., race pauper, Vrty. Scolitantides baton, Bgstr., race baton (only one generation in the Sibillini). Agriades thetis, Rott., race apenninigena, Vrty., I. gen. apenninigena. A. thersites (Cant.), Chapman, race meridiana, Vrty., I. gen. hibernata, Vrty. Polyommatus icarus, Rott., race zelleri, Vrty., I. gen. zelleri. Celastrina semiargus, Rott., race porrecta, Vrty. Hirsutina damon, Schiff., race ansonia, Vrty. Bithys quercus, L., race interjecta, Vrty. Klugia spini, Schiff.,